What is claimed is:

1. A detachable endovascular device assembly, comprising:

a delivery member to deliver the detachable endovascular device assembly to an aneurysm in a body;

a detachable endovascular device including a thermo-resistive element to deliver heat to the detachable endovascular device with passage of a first electrical current through the thermo-resistive element and the detachable endovascular device adapted to take a predetermined shape as a result of the heating; and

a detachable joint joining the detachable endovascular device to the delivery member and adapted to separate to deploy the detachable endovascular device into the aneurysm for embolization thereof.

2. The assembly of claim 1, wherein the detachable joint comprises an electrolytic sacrificial joint joining the detachable endovascular device and the delivery member and adapted to separate with passage of a second electrical current therethrough to deploy the detachable endovascular device into the aneurysm for embolization thereof.

3. The assembly of claim 2, wherein the electrolytic sacrificial joint includes a first conductive wire and a second conductive wire with an electrolytic path therebetween having an electrical resistance, and the thermo-resistive element of the detachable endovascular device having an electrical resistance lower than the electrical resistance of the electrolytic path.

4. The assembly of claim 1, wherein the delivery member includes a catheter.

5. The assembly of claim 1, wherein the delivery member includes a push wire.

6. The assembly of claim 1, wherein the detachable endovascular device includes a thermo-sensitive, shape memory material that takes a predetermined shape when heated by the thermo-resistive element.

7. The assembly of claim 1, wherein the detachable endovascular device includes a thermo-resistive, shape memory element and a polymer that normally holds the detachable endovascular device in a compact configuration and deforms upon heating of the polymer with the thermo-resistive, shape memory element, causing the detachable endovascular device to take a predetermined shape dictated by the thermo-resistive, shape memory element.

8. The assembly of claim 1, wherein the thermo-resistive element may be one or more thermo-resistive elements.

9. The assembly of claim 1, wherein the thermo-resistive element is made of a platinum-tungsten (PtW) alloy.

10. The assembly of claim 1, wherein the thermo-resistive element includes a thermo-resistive wire.

11. The assembly of claim 1, wherein the thermo-resistive element includes a thin film.

12. The assembly of claim 1, wherein the thermo-resistive element is radio-opaque.

13. The assembly of claim 1, wherein the detachable joint comprises a mechanical connector on at least one of the delivery member and the detachable endovascular device.

14. The assembly of claim 1, wherein the detachable joint comprises concentric coils on the delivery member and the detachable endovascular device for inductively delivering electrical energy to the detachable endovascular device.

15. The assembly of claim 1, wherein the detachable joint comprises a connector on one of the detachable endovascular device and the delivery device, and a recess in the other of the detachable endovascular device and the delivery device for receiving the connector therein.

16. The assembly of claim 15, wherein the delivery device comprises a lumen therein communicating with the recess, and a source of pressurized fluid

connected to the lumen for delivering fluid into the recess to eject the connector from the recess to detach the detachable endovascular device from the delivery device.

17. The assembly of claim 15, wherein the connector is secured in the recess by an interference fit, and wherein the delivery device comprises a pusher member for pushing the connector from the recess to detach the detachable endovascular device from the delivery device.

18. The assembly of claim 1, wherein the detachable joint comprises an outer connector on one of the detachable endovascular device and the delivery device for securing an inner connector on the other of the detachable endovascular device and the delivery device, at least one of the outer and inner connectors being configured to change shape to release the detachable endovascular device from the delivery device.

19. The assembly of claim 18, wherein the outer connector is expandable to release the inner connector from the outer connector.

20. The assembly of claim 18, wherein the inner connector is compressible to release the inner connector from the outer connector.

21. A method for embolizing an aneurysm using a detachable endovascular device assembly, comprising:

introducing an endovascular device into the aneurysm, the endovascular device comprising a thermo-resistive element;

supplying a first current to the thermo-resistive element, causing the thermo-resistive element to heat the endovascular device so that the endovascular device expands to a predetermined shape in the aneurysm; and

leaving the endovascular device in the aneurysm.

22. The method of claim 21, wherein:

introducing the endovascular device into the aneurysm comprises advancing a delivery member proximate the aneurysm; and

leaving the endovascular device comprises deploying the endovascular device from the delivery device.

23. The method of claim 22, wherein the endovascular device is joined to the delivery member by an electrolytic sacrificial joint, and wherein the endovascular device is deployed by supplying a second current to the electrolytic sacrificial joint, causing the electrolytic sacrificial joint to separate and the endovascular device to detach from the delivery member.

24. The method of claim 23, wherein the electrolytic sacrificial joint includes a first conductive wire and a second conductive wire with an electrolytic

path therebetween having an electrical resistance, and the thermo-resistive element of the detachable endovascular device having an electrical resistance lower than the electrical resistance of the electrolytic path.

25. The method of claim 23, wherein the electrolytic sacrificial joint includes a supply wire and a return wire, and wherein a return electrode is located on or in a patient, and wherein the second current is supplied through both the supply wire and the return wire to the return electrode through the patient's body, causing the electrolytic sacrificial joint to separate.

26. The method of claim 23, wherein the first current is a DC current.

27. The method of claim 23, wherein the first current is an AC current.

28. The method of claim 21, wherein the delivery member includes a catheter and wherein the endovascular device is delivered to the aneurysm with the catheter.

29. The method of claim 21, wherein the delivery member includes a pusher member, and wherein the endovascular device is delivered to the aneurysm through a lumen of a micro-catheter using the pusher member.

30. The method of claim 21, wherein the detachable endovascular device includes a thermo-sensitive, shape memory material that takes a predetermined shape when heated by the thermo-resistive element.

31. The method of claim 21, wherein the endovascular device includes a thermo-resistive, shape memory element and a polymer that holds the detachable endovascular device in a compact configuration and deforms upon heating the polymer with the thermo-resistive, shape memory element, causing the endovascular device to take a predetermined shape dictated by the thermo-resistive, shape memory element.

32. A detachable device assembly for treating a patient, comprising:

a delivery member to deliver the electrolytically detachable device assembly to a target location within a patient;

a detachable device including an electrically responsive element activatable by passing a first electrical current through the electrically responsive element; and

a detachable joint joining the detachable device to the delivery member and adapted to separate to deploy the detachable device from the delivery member.

33. The assembly of claim 32, wherein the detachable joint comprises an electrolytic sacrificial joint joining the detachable device and the delivery member and adapted to separate by passing a second electrical current therethrough to deploy the detachable device at the target location.

34. The assembly of claim 32, wherein the electrically responsive element includes a thermo-resistive element to deliver heat to the detachable device with passage of the first electrical current through the thermo-resistive element and the detachable device adapted to take a predetermined shape as a result of the heating.

35. The assembly of claim 32, wherein the electrically responsive element includes a microelectromechanical system that is electrically activatable by passage of the first electrical current therethrough.

36. The assembly of claim 32, wherein the electrically responsive element includes a sensor that is electrically activatable by passage of the first electrical current therethrough.

37. The assembly of claim 32, wherein the electrically responsive element includes a contractile element that is electrically stimulated by passage of the first electrical current therethrough.

38. The assembly of claim 32, wherein the electrically responsive element includes a light emitting diode that is electrically activatable by the first electrical current.

39. The assembly of claim 32, wherein the electrically responsive element comprises one or more electrically activatable elements.

40. The assembly of claim 32, wherein the electrically responsive element includes a piezoelectric crystal that is activated by the first electrical current.

41. The assembly of claim 32, wherein the electrically responsive element includes an electromagnetic element that is activated by the first electrical current.

42. A method of using an electrolytically detachable device assembly, comprising:

delivering a delivery member to a target location, the delivery member comprising an electrically responsive element thereon;

activating the electrically responsive element by supplying a first electrical current to the electrically responsive element; and

detaching the electrically responsive element from the delivery member, thereby leaving the electrically responsive element at the target location.

43. The method of claim 42, wherein detaching the electrically responsive element comprises supplying a second current to an electrolytic

sacrificial joint connecting the electrically responsive element to the delivery member, causing the electrolytic sacrificial joint to separate.

44. The method of claim 43, wherein the electrolytic sacrificial joint includes a first conductive wire and a second conductive wire with an electrolytic path therebetween having an electrical resistance, and the electrically responsive element of the detachable endovascular device includes an electrical resistance lower than the electrical resistance of the electrolytic path.

45. The method of claim 42, wherein the electrically responsive element includes a thermo-resistive element, and activating the electrically responsive element comprises supplying the first current to the thermo-resistive element to deliver heat to the electrically responsive element, the electrically responsive element adopting a predetermined shape as a result of the heating.

46. The method of claim 42, wherein the electrically responsive element includes a microelectromechanical system that is electrically activatable with passage of the first electrical current therethrough.

47. The method of claim 42, wherein the electrically responsive element includes a sensor that is electrically activatable with passage of the first electrical current therethrough.

48. The method of claim 42, wherein the electrically responsive element is one or more electrically activatable elements.